

## Cooperative effect of hydrogen bonds in the complexes of aliphatic alcohols with proton acceptors in chloroform

Varfolomeev M., Abaidullina D., Rakipov I., Solomonov B.  
*Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia*

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### Abstract

Effect of solvation on the frequency of stretching vibrations of O-H groups of aliphatic alcohols in complexes with acetonitrile, dimethyl sulfoxide, diethyl ether, pyridine, tetrahydrofuran, and triethylamine in various media was studied by IR spectroscopy. We found that the strength of hydrogen bonds in the studied complexes increased considerably at the interaction with chloroform as a solvent. The contribution of cooperative effect was estimated. The enthalpies of cooperative effect in the complexes consisting of three different molecules are estimated for the first time. © 2008 MAIK Nauka.

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